GNFAC Avalanche Advisory for Sun Feb 3, 2013

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Sunday, February 3 at 7:30 a.m. **406 Brewery** and **Helio Collective** sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

For the first time in nearly a week there is no new snow to report. Today will be a near ground hog day to yesterday with plenty of sunshine and warm temperatures. This morning, temps are in the high teens to mid-twenties F and winds are averaging 5-15 mph out of the WSW with gusts reaching close to 30 mph. Today, highs will climb into the 30s F under clear skies and winds will remain out of the WSW blowing 5-20 mph. No new snow is expected over the next 24 hours.

Snowpack and Avalanche Discussion

Bridger Range Gallatin Range Madison Range

Lionhead area near West Yellowstone Cooke City

Yesterday, the snowpack received a well-deserved breather. After impressive storm totals of 55" in the Bridger Range and 1-3 feet elsewhere, the pack nearly doubled in many areas. This put a tremendous amount of stress on the snowpack. With little surprise, both natural and human triggered avalanches have been reported throughout our advisory area.

Today, there will be two main avalanche problems to consider when traveling in the backcountry. The first and most recognizable will be wind loaded slopes. Yesterday, natural avalanches occurred on wind loaded slopes in the Bridger Range (**photo**, **photo**). Recent natural activity was also observed on Cedar and Fan mountains near Big Sky (**photo**). Today, all wind loaded slopes are suspect and should be approached with caution. Watch for obvious signs of loading such as cornices, rounded drifts and rippled texture of the snow surface. Avoiding slopes where these signs are present will be a simple way to stay out of trouble.

The second avalanche problem is buried persistent weak layers. In the mountains near West Yellowstone, a layer of facets is now buried 1-1.5 deep. On Friday, Ace Powder Guides spotted 10 natural avalanches on S facing slopes along <u>Kirkwood Ridge</u> near West Yellowstone. Also, a skier at Bacon Rind in the southern Madison Range got 23 out of 28 ECT's to propagate on the layer of surface hoar Doug found earlier in the week – a clear indication this layer is willing and able to produce avalanches.

A trickier problem is weak facets buried deeper in the snowpack. These facets exist on many slopes that previously had less than 2-3 feet of snow due to low elevation or wind scouring. This type of structure was responsible for two human triggered avalanches on a west facing slope in Beehive Basin on Friday. I found similar conditions a few days ago on <u>Mt. Ellis</u> and on <u>Mt Blackmore</u> (video). In addition, Mark found a comparable snowpack on a south facing slope along Buck Ridge (video). Skiers outside of Cooke City also got cracking and collapsing on mid-elevation slopes on Friday (photo). Today, assume every slope has weak facets buried under the new snow until you have enough evidence to prove otherwise. This is not an impossible task but will require careful snowpack evaluation.

Today, dangerous avalanche conditions exist on wind loaded slopes and slopes steeper than 35 degrees which have a **CONSIDERABLE** avalanche danger. All other slopes have a **MODERATE** avalanche danger.

I will issue the next advisory tomorrow morning at 7:30 a.m. If you have any snowpack or avalanche observations drop us a line at <u>mtavalanche@gmail.com</u> or call us at 587-6984.

Avalanche Accident

A skier was caught and fully buried in an avalanche in the Centennial Mountains along the Montana/Idaho border. His partners were all in safe locations watching him descend, all had rescue gear, and uncovered him in about 3 minutes – good job! He was injured as the avalanche carried him through trees fortunately he did not sustain serious injuries. Watch this **video** from the skier who was caught. See photos of the **crown** and **debris**.

February 16: 11th Annual King and Queen of the Ridge

The 11th Annual King and Queen of the ridge Hike/Ski-a-thon fundraiser is Saturday, February 16. The event supports avalanche education. Enter as an individual or a team. Collect pledges for the number of hikes you can do in five hours. Kids and families are encouraged to hike too! Prizes will be awarded to the most hikes $(1^{st}, 2^{nd}, and 3^{rd})$; most money raised, most laps for a team, most money raised for a team. More Information / Registration Form

EDUCATION

In **Bozeman**, on Wednesday, February 6, REI is hosting a *1-hour Avalanche Awareness lecture for Women*. Space is limited and registration is required: http://www.rei.com/event/47916/session/64605

The Friends are teaching a free *Companion Rescue Course* in **Big Sky**, at Grizzly Outfitters, on Friday, February 8 from 6-8 p.m., followed by a field session the next day from 10 a.m. to 2 p.m. Space is limited and pre-registration is required: https://ticketriver.com/event/5830-companion-rescue-clinic-for-skiers-&-boarders